

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

1. (CURRENTLY AMENDED) A circuit comprising:

a buffer for storing a plurality of data packets; and

a test circuit configured to (i) monitor a number of said plurality of data packets in said buffer, (ii) receive an additional data packet to said plurality of data packets, (iii) store said additional data packet into said buffer responsive to said number being less than a first threshold, (iv) discard said additional data packet in accordance with a probabilistic test responsive to said number being greater than said first threshold and (v) present an identification signal to a sender of said additional data packet, said identification signal indicating that ~~identifying~~ said additional data packet ~~as~~ was discarded.

2. (CURRENTLY AMENDED) The circuit according to claim

1, wherein said test circuit is further configured to always discard said additional data packet without storing said additional data packets in said buffer in response to said number being at least as great as a second threshold.

3. (CANCELED)

4. (PREVIOUSLY PRESENTED) The circuit according to claim 1, wherein said test circuit is further configured to present a rate signal to said sender in a slow rate condition in response to said number being greater than said first threshold.

5. (PREVIOUSLY PRESENTED) The circuit according to claim 4, wherein said test circuit is further configured to present said rate signal to said sender in a full rate condition in response to said number being less than said first threshold.

6. (ORIGINAL) The circuit according to claim 1, wherein said probabilistic test is based upon a precedence.

7. (ORIGINAL) The circuit according to claim 1, wherein said probabilistic test is based upon a priority.

8. (ORIGINAL) The circuit according to claim 1, wherein said probabilistic test is based upon a volume rate.

9. (ORIGINAL) The circuit according to claim 1, wherein said number is a time average of said data packets in said buffer.

10. (PREVIOUSLY PRESENTED) The circuit according to claim 9, wherein said test circuit is further configured to (i)

discard said additional data packet in response to said number being at least as great as a second threshold, (ii) present a rate signal in a first condition in response to said number being greater than said first threshold, and (iii) present said rate signal in a second condition in response to said number being less than said first threshold.

11. (CURRENTLY AMENDED) A method for managing congestion of a plurality of data packets in a buffer of a circuit, comprising the steps of:

(A) monitoring a number of said plurality of data packets in said buffer;

(B) receiving an additional data packet to said plurality of data packets;

(C) storing said additional data packet into said buffer in response to said number being less than a first threshold;

(D) discarding said additional data packet in accordance with a probabilistic test without said additional data packets reaching said buffer in response to said number being greater than said first threshold; and

(E) presenting an identification signal from said circuit to a sender of said additional data packet, said identification signal indicating that ~~identifying~~ said additional data packet ~~as~~ was discarded.

12. (CURRENTLY AMENDED) The method according to claim 11, further comprising the step of:

always discarding said additional data packet in response to said number being at least as great as a second threshold.

13. (CANCELED)

14. (PREVIOUSLY PRESENTED) The method according to claim 11, further comprising the step of:

presenting a rate signal to said sender in a slow rate condition in response to said number being greater than said first
5 threshold.

15. (PREVIOUSLY PRESENTED) The method according to claim 14, further comprising the step of:

presenting said rate signal to said sender in a full rate condition in response to said number being less than said first
5 threshold.

16. (PREVIOUSLY PRESENTED) The method according to claim 11, further comprising the step of:

time averaging said number prior to step (C).

17. (CURRENTLY AMENDED) A circuit comprising:

means for monitoring a number of a plurality of data packets in a buffer;

5 means for receiving an additional data packet to said plurality of data packets;

means for storing said additional data packet into said buffer in response to said number being less than a first threshold;

10 means for discarding said additional data packet without storing said additional data packets in said buffer in accordance with a probabilistic test in response to said number being greater than said first threshold; and

15 means for presenting an identification signal ~~identifying from said circuit to a sender of said additional data packet, said identification signal indicating that~~ said additional data packet ~~as~~ was discarded.

18. (PREVIOUSLY PRESENTED) The circuit according to claim 2, wherein said test circuit is further configured to present a rate signal to a sender of said additional data packets in a stop transmission condition in response to said number being greater
5 than said second threshold.

19. (PREVIOUSLY PRESENTED) The method according to claim 12, further comprising the step of:

presenting a rate signal to a sender of said additional data packets in a stop transmission condition in response to said number being greater than said second threshold.

20. (PREVIOUSLY PRESENTED) The circuit according to claim 9, wherein said number is determined before said additional data packet is permitted into said buffer.

21. (PREVIOUSLY PRESENTED) The circuit according to claim 1, further comprising a queuing management circuit disposed between said buffer and an output and configured to transfer said data from said buffer to said output.

22. (PREVIOUSLY PRESENTED) The circuit according to claim 17, further comprising means for managing presentation of said data packets from said buffer to an output.